## **ABSTRACT**

A fiber coating applicator includes a chamber and a cup positioned over the chamber. The cup is connected to the chamber by an entrance aperture. The chamber includes an exit aperture opposite the entrance aperture. The cup, entrance aperture, chamber, and exit aperture define a pathway for a fiber, such as an optical fiber, to be coated. The chamber further includes an input port for pumping a coating material into the chamber. The entrance aperture is dimensioned such that as a fiber travels along the pathway and coating material is pumped into the chamber, coating material travels upward through the entrance aperture around the fiber into the cup, the upward flow of coating material being restricted by the fiber and entrance aperture such that there is a hydrostatic pressure in the chamber. The exit aperture is dimensioned to shape coating material around a fiber traveling along the pathway.

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